

IN THE CLAIMS

Please enter the following amendments to Claim 27. Claim 27 has been amended to correct informalities. Independent claims 1, 26, and 30 have been amended to clarify that the bitstream can include video data as well as other data. Claim 31 has been added as a system claim.

1. (currently amended) A method for converting the bit rate of a compressed bitstream to use an available bandwidth of a channel, the method comprising:
re-quantizing a first portion of the bitstream ~~containing~~ including video data using a first re-quantization scheme; and
re-quantizing a second portion of the bitstream ~~containing~~ including video data using a second re-quantization scheme.
2. (original) The method of claim 1 wherein the second re-quantization scheme is computationally more demanding than the first re-quantization scheme.
3. (original) The method of claim 2 wherein the first re-quantization scheme includes basic re-quantization.
4. (original) The method of claim 2 wherein the second re-quantization scheme includes motion compensated re-quantization.
5. (original) The method of claim 1 further including determining the available bandwidth of the channel.
6. (original) The method of claim 1 wherein the second re-quantization scheme includes full decoding and re-encoding of the second portion.
7. (original) The method of claim 6 further including changing the resolution of the second portion.
8. (original) The method of claim 1 wherein the first and second portion each include a frame of the video data.
9. (original) The method of claim 8 wherein the compressed bitstream is an MPEG compressed bitstream and the first portion includes a B frame.

10. (original) The method of claim 8 wherein the compressed bitstream is an MPEG compressed bitstream and the second portion includes a P frame.
11. (original) The method of claim 10 wherein the first portion includes a P frame and the P frame is the last P frame in a group of pictures.
12. (original) The method of claim 1 wherein the first portion comprises color video data.
13. (original) The method of claim 1 wherein the second portion comprises brightness video data.
14. (original) The method of claim 1 wherein the first and second re-quantization schemes are performed in real time.
15. (original) The method of claim 1 further including monitoring the processing load of a processor in a network device.
- 16 (withdrawn) A method for converting the bit rate of a compressed bitstream to use an available bandwidth of a channel, the method comprising: selectively re-quantizing a portion of the bitstream according to one of two re-quantization schemes, the first re-quantization scheme comprising variable length decoding the portion, inverse quantizing the portion, re-quantizing the portion with a different quantization step size and variable length encoding the portion, the second re-quantization scheme comprising motion compensated re-quantization of the portion.
17. (withdrawn) The method of claim 16 wherein the portion is a frame of the compressed bitstream.
18. (withdrawn) The method of claim 17 wherein the frame is re-quantized using the first re-quantization scheme when the frame is a B frame and the frame is re-quantized using the second re-quantization scheme when the frame is a P frame.

19. (withdrawn) The method of claim 17 wherein the frame is re-quantized using the first re-quantization scheme when the frame includes chroma information and the frame is re-quantized using the second re-quantization scheme when includes luma information.

20. (withdrawn) The method of claim 16 further including performing motion estimation to produce motion vectors for the motion compensated re-quantization.

21. (withdrawn) A network device for providing compressed video data onto a network, the network device comprising: a re-quantization apparatus that receives a compressed video bitstream having a first bit rate and outputs the compressed video bitstream having a second bit rate, the re-quantization apparatus including a first portion configured to receive a first portion of the compressed video bitstream and output the first portion after re-quantization by a first re-quantization scheme, the re-quantization apparatus including a second portion configured to receive a second portion of the compressed video bitstream and output the second portion after re-quantization by a second re-quantization scheme; and a transmitter configured to transmit the compressed video bitstream having the second bit rate onto the network.

22. (withdrawn) The network device of claim 21 further including a network interface configured to receive the compressed video bitstream having the first bit rate from the network.

23. (withdrawn) The network device of claim 21 further including a rate controller coupled to the re-quantization apparatus.

24. (withdrawn) The network device of claim 21 wherein the first portion of the re-quantization apparatus is included in the second portion of the re-quantization apparatus.

25. (withdrawn) The network device of claim 21 further including a processor whose processing load at least partially determines which of the first portion and the second portion of the re-quantization apparatus is used.

26. (currently amended) A system for converting the bit rate of a compressed bitstream to use an available bandwidth of a channel, the system comprising:

means for re-quantizing a first portion of the bitstream ~~containing~~ including video data using a first re-quantization scheme; and

means for re-quantizing a second portion of the bitstream ~~containing~~ including video data using a second re-quantization scheme.

27. (Currently Amended) The system of claim 26 wherein the means for ~~means for~~ re-quantizing the first portion is included in the means for re-quantizing the second portion.

28. (original) The system of claim 26 wherein the means for re-quantizing the first portion includes means for performing basic re-quantization.

29. (original) The system of claim 26 wherein the means for re-quantizing the second portion includes means for performing motion compensated re-quantization.

30. (currently amended) A computer readable medium including instructions for converting the bit rate of a compressed bitstream to use an available bandwidth of a channel, the instructions comprising:

instructions for re-quantizing a first portion of the bitstream ~~containing~~ including video data using a first re-quantization scheme; and

instructions for re-quantizing a second portion of the bitstream ~~containing~~ including video data using a second re-quantization scheme.

31. (New) An apparatus for converting the bit rate of a compressed bitstream, the apparatus comprising:

memory,

a processor coupled to memory, the processor configured to re-quantize a first portion of the bitstream including video data using a first re-quantization scheme and re-quantize a second portion of the bitstream including video data using a second re-quantization scheme.